

Delta Research and Extension Center

Delta Branch Experiment Station

Mississippi Agricultural and Forestry Experiment Station

Division of Agriculture, Forestry, and Veterinary Medicine



Mississippi State UNIVERSITY

September 26, 2014

RE: Proposed registration of Flupyradifurone

To Whom it May Concern:

The purpose of this letter is to support the proposed registration of Flupyradifurone from Bayer CropScience. My comments will be related to the Sivanto 200 SL label and its uses in cotton and cereal grains (sorghum). I am an Associate Professor at the Mississippi State University, Delta Research and Extension Center in Stoneville, MS. My primary responsibilities include research and extension activities related insect pest management in agricultural crops grown in Mississippi. Mississippi has a diverse agricultural environment that is conducive to devastating losses from various insect pests. Aphids can be a particularly troublesome pest in multiple crops. More specifically, the cotton aphid, *Aphis gossypii*, has a long history of causing damage and yield losses in cotton. This is compounded by the fact that this species has shown a propensity to rapidly develop resistance to multiple classes of insecticides used for their management. Currently, only two insecticides currently labeled in cotton provide acceptable control. They include sulfoxaflor (IRAC Group 4C) and flonicamid (IRAC Group 9C). The addition of an insecticide with a new mode of action (IRAC Group 4D), would be instrumental for our insecticide resistance management plans for this pest and provide a valuable rotation partner for the insecticides currently used.

More importantly, the proposed registration of flupyradifurone for use in cereal grains (specifically in sorghum) is critical for Mississippi and other states where sorghum is grown. The sugarcane aphid, *Melanaphis sacchari*, became a pest of sorghum for the first time in 2013 in Texas and Louisiana. In just one year, damaging levels of this insect were found in all counties in Mississippi where sorghum was produced in 2014. Additionally, it has spread to new areas of Texas and Louisiana as well as Arkansas, Georgia, Alabama, Florida, Oklahoma, Tennessee, and Kansas. In Mississippi, yield losses from this insect in sorghum typically ranged from 20% to 80% and numerous fields were not harvestable in 2014 resulting in a 100% yield loss. Many of these losses can be attributed to a severe lack of available products to control this pest. Currently, no insecticide labeled in sorghum will provide control of this insect. As a result, Mississippi (and other states) requested and received an emergency exemption (Section 18) to use sulfoxaflor during the 2014 season. Without this exemption, the 2014 sorghum crop would have been a complete disaster in Mississippi and very little of the crop would have been harvestable. Even with the availability of an acceptable product in 2014, the amount of sorghum grown in 2015 will be drastically reduced (approximately 70-80% reduction) because of the devastation this insect caused in 2014. As a result, other products that provide acceptable control of this insect are critical for sustained production of sorghum in Mississippi. Any new registration is critical because sorghum is an important rotation partner for other crops, especially in non-irrigated fields.

In research plots from across the southern U.S. in 2014, flupyradifurone provided very good control of this insect. Therefore, the registration of flupyradifurone would provide at least one insecticide to manage this devastating pest. One product, like flupyradifurone, that provides good control will provide a short term solution to a devastating problem, but more products along with other IPM strategies are needed to ensure that sorghum productions remains a profitable and viable option for growers. In closing, I highly support the proposed registration of flupyradifurone. It will provide a valuable alternative to sulfoxaflor for cotton aphid in cotton and the only option for sugarcane aphid control in sorghum.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey Gore".

Jeffrey Gore

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